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ABSTRACT

The success of Oakland University's Summer Support Program is analyzed and results are presented in 15 tables. Data presented include: number of graduates from Oakland as compared with number of entries; the amount of movement from one major to another; length of time Summer School Students (SSS) stay enrolled at Oakland; total credits accumulated by geographical areas; the relationship between year of entry and last year enrolled and the number of graduates by groups and sex; first-term averages of men and women; cumulative averages of men and women; credit-taking tendencies of students and graduates for each year; relationship between the year the student received the degree and the number of years it took to get that degree; the dropout/transfer percentages; relationship between total cumulative credits of SSS and number of years enrolled at Oakland; correlations between cumulative credits and the year of entry; relationship between term to graduate after grades are in and year of entry; correlation of the year of entry, year degree awarded and sex against residence, entry major, and last major; and a partial correlation controlling for differences between the cumulative number of credits earned, the difference between the term credits attempted minus those earned, and the number of years education was pursued at Oakland University. (SPG)

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A REVIEW OF PROGRESS

A COMPREHENSIVE ANALYSIS OF THE ACADEMIC PERFORMANCE OF STUDENTS IN SPECIAL PROGRAMS: A TEN-YEAR REPORT

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June, 1977

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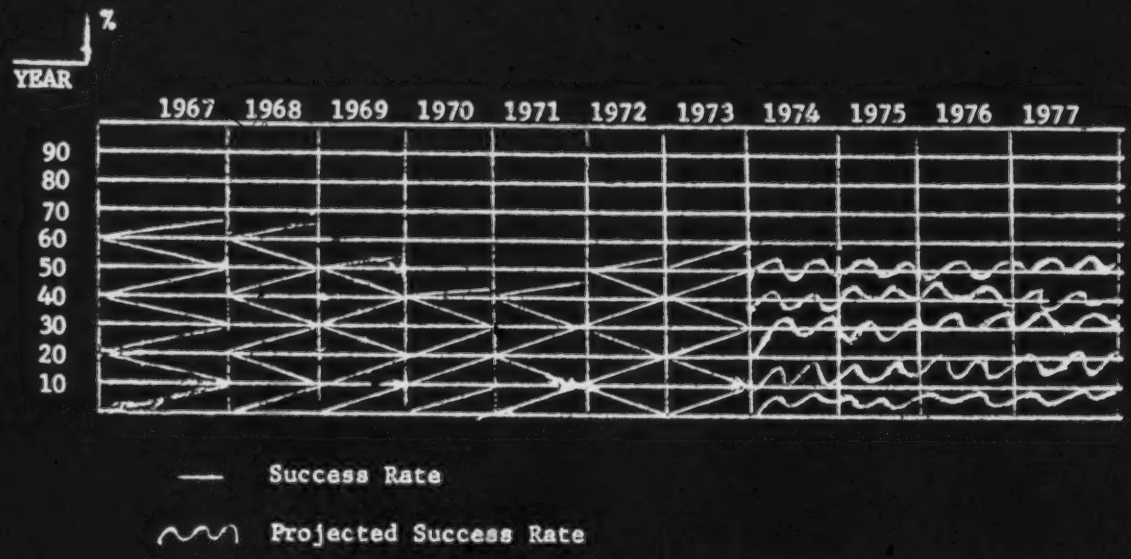
A TEN-YEAR REPORT



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A C K N O W L E D G E M E N T S

Without the professional cooperation from the Office of Institutional Research, there would be no data base. Dr. David C. Beardslee gracefully provided the raw data from O.I.R. files and he, along with the staff of O.I.R. of which he is director, also gave the much needed technical assistance which was necessary in order to comprehend the coding modes within the data provided.

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The Student Services personnel offered services in kind from Dean Manuel H. Pierson to the secretaries who typed the whole report and used particular skill in typing the charts. While the report represents the efforts of the Student Services staff, the Evaluation Specialist accepts responsibility for any error in the report.

INTRODUCTION

A random sample of 95 Summer Support students (SSS) from 31 high schools produced a mean high school grade point average of 2.23 which illustrates that the SSS are, more or less, "C" students at the secondary level. Another random sample of 80 students, who entered in the last four years, generated 0.81 "N" grades per one term of enrollment at Oakland University.

The marital status of the 39 students of the first two classes is unknown. The data indicate that seven students in the 1969 class were married at some point prior to graduation and/or exit from Oakland University.

There were four, two, and two married persons in the 1970-72 classes respectively; since 1972, no student has been coded as married. The data suggest that the SSS from 1973 to 1976 may differ from a typical college population in that respect.

The SSS have tended to reside in the dormitories in a room and/or board arrangement. It was, and still is, mandatory that the SSS live in the dormitory for the first year of their college program. Over 71 percent of the SSS remained in the dormitory for their total stay at Oakland University.

TEN-YEAR REPORT

Table #1 below shows the amount of success Oakland's Summer Support Program has had in its first decade. The first class had 19 participants of which 12 were awarded Oakland University degrees at the rate of two, eight, and two in 1970, 1971, and 1972 respectively. As demonstrated in Table #1, these figures represent a 63 percent graduation rate from the first institution attended. The second (1968) class had 20 students and a 65 percent completion rate at Oakland as resulting from 13 of those 20 students finishing their degrees at Oakland. When the 1969 class is examined, one finds that 39 percent of the 61 persons who started at Oakland finished here.

Because many of the Summer Support students are enrolled in five, six, or even seven years in pursuit of their education, another interesting statistic begins to surface--that is the number of students currently enrolled at Oakland although four or five years have passed since the person first started college. Thus, 14 percent of the 429 who enrolled between 1967 and 1972 are currently in the University and have obtained the status of seniors

TABLE 1

A CROSS TABULATION OF TERM AND YEAR DEGREE AWARDED TERM AND YEAR OF ENTRY BY AND PER ANNUAL GRADUATION

Year Degree Awarded	Year of Entry						
	1967	1968	1969	1970	1971	1972	Row Total
1970	(2) 100.0 16.7 1.7	(0)	(0)	(0)	(0)	(0)	(2) 1.7
1971	(8) 88.9 66.7 6.8	(1) 11.1 7.7 0.9	(0)	(0)	(0)	(0)	(9) 7.7
1972	(2) 11.1 16.7 1.7	(11) 61.1 84.6 9.4	(4) 22.2 19.0 3.4	(1) 5.6 2.6 0.9	(0)	(0)	(18) 15.4
1973	(0)	(1) 4.5 7.7 0.9	(12) 54.5 57.1 10.3	(9) 40.9 23.7 7.7	(0)	(0)	(22) 18.8
1974	(0)	(0)	(4) 15.4 19.0 3.4	(16) 61.5 42.1 13.7	(5) 19.2 27.8 4.3	(1) 3.8 7.1 0.9	(26) 22.2
1975	(0)	(0)	(1) 6.7 4.8 0.9	(1) 6.7 2.6 0.9	(3) 20.0 16.7 2.6	(9) 60.0 64.3 7.7	(14) 12.8

TABLE 1 (continued)

Year Degree Awarded	Year of Entry						
	1967	1968	1969	1970	1971	1972	Row Total
1976	(0)	(0)	(1) 6.7 4.8 0.9	(1) 6.7 2.6 0.9	(3) 20.0 16.7 2.6	(9) 60.0 64.3 7.7	(14) 12.8
Column Total	(12) 10.4	(13) 11.2	(21) 18.1	(38) 32.8	(18) 15.5	(14) 12.1	(116) 100.0
Total Cohort	(19)	(20)	(61)	(122)	(117)	(90)	
Currently Enrolled at Oakland U.			(7)	(6)	(20)	(25)	14.0
% Graduated at Oakland University	63.0	65.0	39.0	33.0	19.0	22.0	31.0
% Possible at Oakland U.		X	X	X	X	X	45.0
% Transferred as Junior or Senior at Oakland U.	0.2	0.5	2.9	3.5	3.1	2.2	14.0*
% Projected	X	X	X	X	X	X	59.0*

*Based on 1975 cut off, there are about 2% Oakland University sophomore transfers receiving college degrees (where 0.5% or two persons transferred and one person graduated for 1973 class.

Count
Row %
Col %
Tot %

based on total credits earned. Moreover, Table #1 reflects that approximately 14 percent had attained junior or senior status before transferring and graduating from other centers of higher learning. (See Table #10 below.)

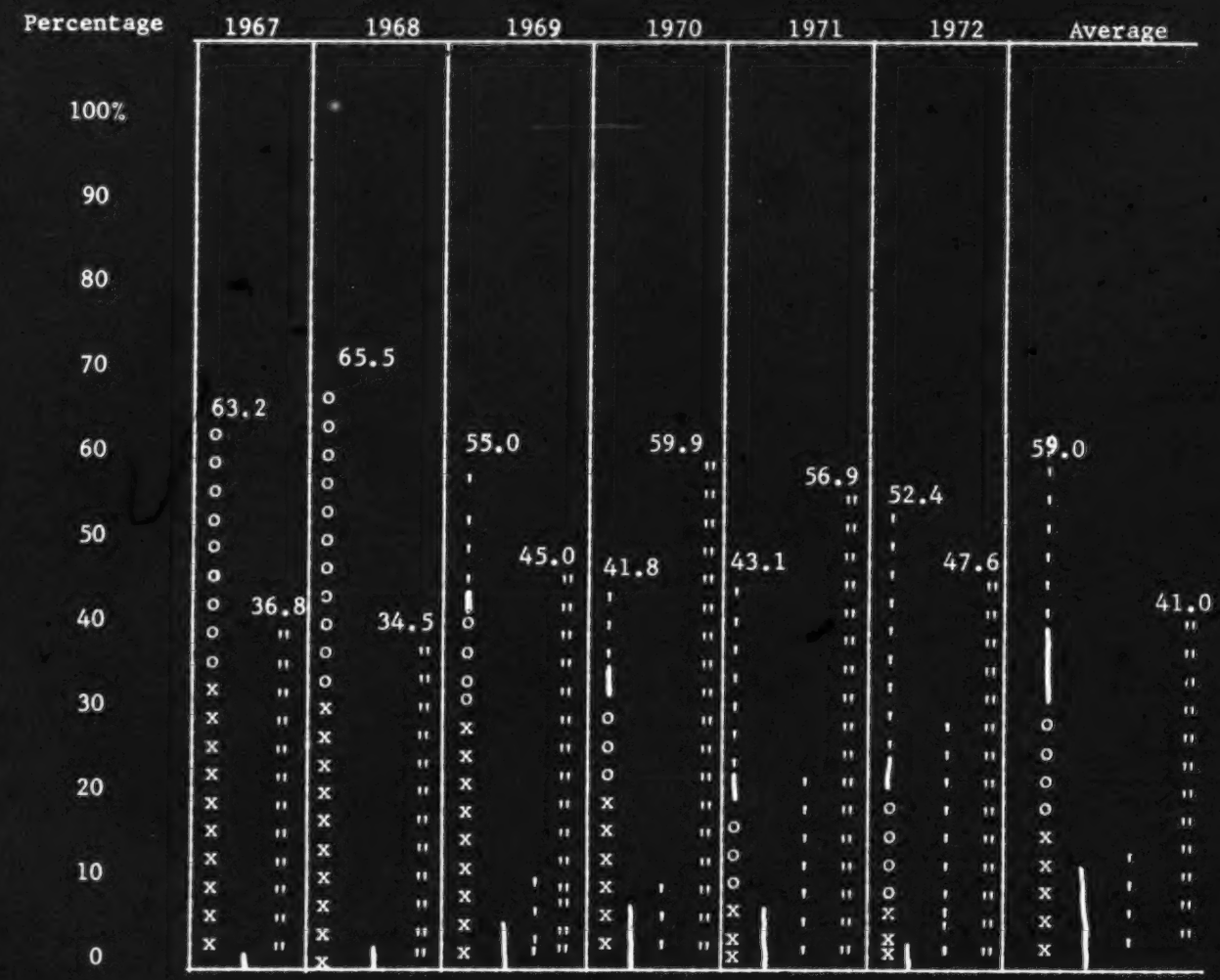
Also, the difficulties inherited in increasing a program size are suggested in the data for the years following 1969. The program staff did not increase at the same rate as the student population; at this point, the retention rates tended to drop. Considerable caution should be exercised because of smallness of the data size and societal phenomena not reflected in the data.

The early 1970's offered minorities persons opportunities to attend predominantly white institutions which had not been available earlier. This movement of minorities students from one institution to another was demonstrated in the author's dissertation which was completed in 1976 at the University of Michigan: "An Exploration of the Causes of Black Attrition at Predominantly White Institutions of Higher Education." In that study, over 50 percent of blacks attending white universities had attended one to four other white colleges before becoming enrolled at their present institution. Therefore, transfers for the 1970's can be predicted to be considerably higher than in the 1960's.

Still, when one exercises the caution necessary in interpreting small data samples and considers the fact that that program worked, for the most part, with inner-city minority youths of "C" caliber based on secondary grades, the 45 percent success of Oakland's special programs in retaining those persons at Oakland until degree completion seems impressive. The 59 percent

FIGURE 1

A BAR-GRAPH OF STUDENTS ENTRY/EXIT ACTIVITIES BY YEAR OF ENTRY (YOE) AND SEX



Totals (NS) (19) (20) (61) (122) (117) (90) (429)

xxx = male O.U. degree receivers.

——= transferred from O.U. as Junior/Senior and received degree from other college.

''' = still enrolled at O.U. as Seniors.

""" = persons dropped and/or status unknown.

ooo = female O.U. degree receivers

projected success rate seems unbelievable until one observes the dedication and professionalism of the support staff. The belief in these disadvantaged youngsters, as demonstrated by the Dean for Student Services and the Director of Special Programs, is the motivating force of the whole Student Services staff as exemplified by the program's successes. Figure #1 gives a graphic illustration of the most of the data included in Table #1.

Table #2 reflects the amount of movement from one major to another and suggests areas where administrative concerns are warranted. Obviously, there is significant difference if one compares one major against others; but the cells are too small in this sample to produce accurate statistical confidence. Residential areas did not significantly predict majors, but sex was measurably different. The majors referred to specifically had either 10 persons starting or changing to that particular field. Management has 72 people choosing it initially and 84 persons are currently management majors; that includes the nine and ten persons respectively for the graduates. The percentage refers directly to the change within the major only. That is, in management, the change from 72 to 84 is a 14 percent increase which is described as "+14%." (In this report, it should be noted that whenever N's and % are in the same cell, the N's will be in parentheses unless stated to the contrary.)

Some of the flow between and among the majors can be explained by the fact that many minority students come to college with only limited knowledge as to what to major in or the many different majors one could choose from for that matter. Then a part of the change represents rational decision making - the student learns which majors minorities tend to graduate in and

TABLE 2

A COMPARISON OF MAJOR ENTRY AND LATEST MAJOR BETWEEN TOTAL STUDENTS AND GRADUATES

Majors	Entry Major	Latest Major	% Changed	Entry Major	Latest Major	% Changed
Management	8.9 (72)	10.5 (84)	+14	8.3 (9)	9.1 (10)	+ 11
School of Engineering	5.3 (43)	6.4 (51)	+16	2.8 (3)	0.9 (1)	- 67
Computer Science	1.1 (9)	1.4 (11)	+11	0	0	0
Nursing	2.7 (22)	2.4 (19)	-16	0	0	0
Liberal Arts/ Undergraduate	36.7 (296)	21.6 (173)	-58	2.1 (35)	0	-3500
Art History	2.0 (16)	1.0 (8)	-50	2.8 (3)	0	- 300
English	0.9 (7)	1.5 (12)	+58	1.8 (2)	2.7 (3)	+ 50
History	1.0 (8)	1.9 (14)	+57	4.6 (5)	4.5 (5)	0
Music	1.7 (14)	1.9 (15)	+ 7	0	0	0
Speech Communications	1.0 (8)	2.5 (20)	+250	0	2.7 (3)	+ 300
Biology	3.8 (31)	5.0 (40)	+22	2.8 (3)	5.5 (3)	+ 100
Economic	0.6 (5)	2.0 (16)	+320		3.6 (4)	+ 400
Political Science	4.0 (32)	6.4 (51)	+59	2.8 (3)	15.5 (17)	+ 567
Psychology	5.0 (40)	7.9 (63)	+57	5.5 (6)	8.2 (9)	+ 50
Sociology	5.7 (46)	6.6 (53)	+13	8.3 (9)	11.8 (13)	+ 44
2nd English	1.7 (14)	1.8 (14)	0	2.8 (3)	2.7 (3)	0

Continuation of TABLE 2

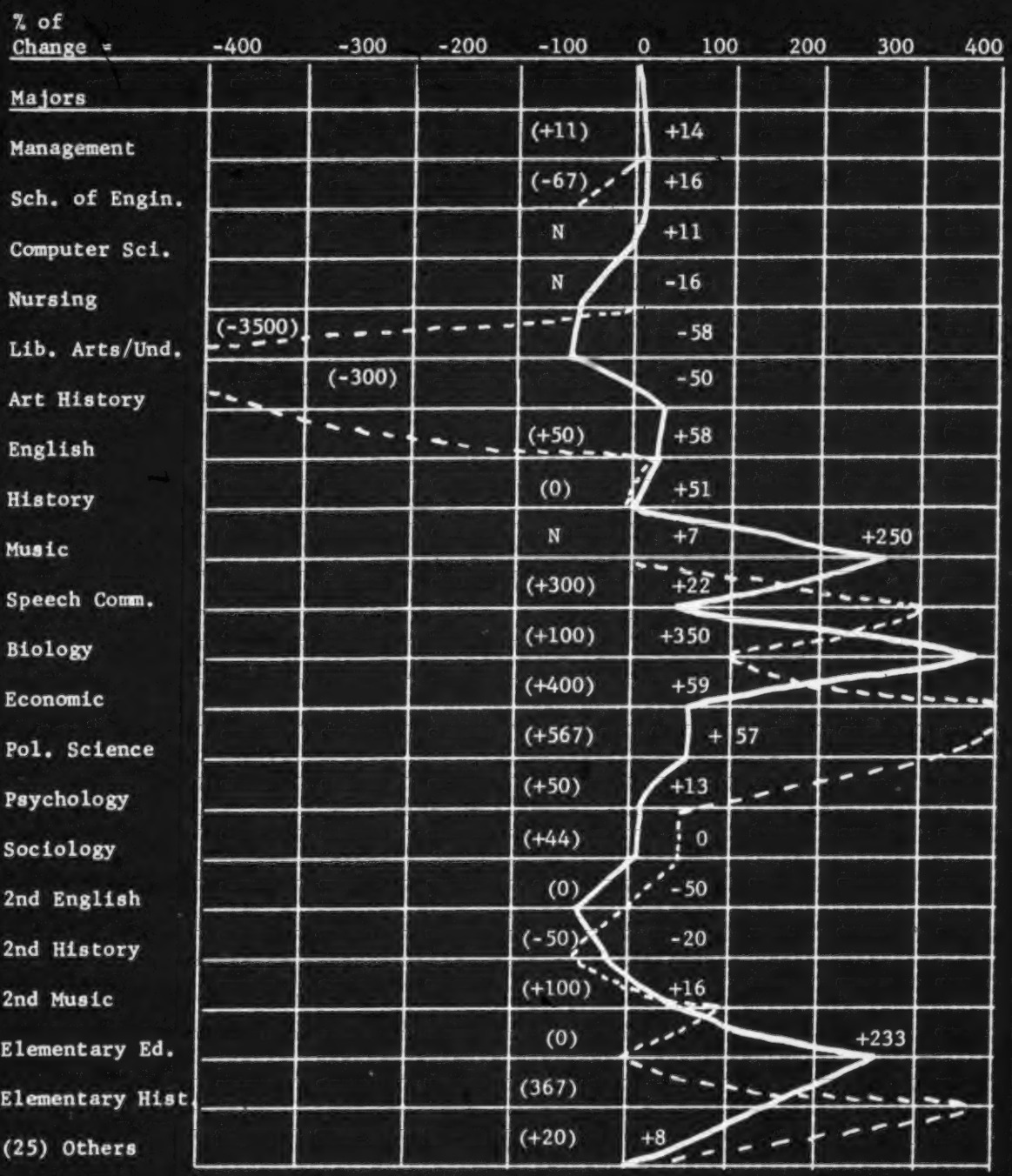
Majors	Entry Major	Latest Major	% Changed	Entry Major	Latest Major	% Changed
2nd History	2.7 (22)	1.4 (11)	- 50	5.5 (6)	2.7 (3)	- 50
2nd Music	1.9 (15)	1.5 (12)	- 20	0	0.9 (1)	+ 100
Elementary Education	1.7 (14)	2.9 (33)	+ 61	8.3 (9)	8.2 (9)	0
Elementary History	1.1 (9)	2.6 (21)	+ 233	2.8 (3)	10.0 (11)	+ 367
25 Others	10.3 (83)	11.1 (89)	+ 8	9.2 (10)	10.9 (12)	+ 20
N	(806)	(800)		(109)	(110)	

discovers the professors who believe that minorities can not handle certain majors and that belief tends to manifest in the grading practices of those professors. Man's perceptions have influenced his actions since time immemorial, "So as a man thinketh, so is he" is our earliest documentation of that phenomenon. Figure 2 gives one a quick overview of the flow activities as related to majors change.

Table 3 shows how long the SSS stay enrolled at O.U. without references to specific progress, although generally the person must maintain a 2.00 to stay at this university any length of time. It can be observed that a number of persons need more than four years to graduate. So far, 17 percent of the SS students are staying enrolled longer than four years which suggests a strong holding power of the university or a great deal of determination generated by the Special Program experience.

Table 4 demonstrates that there is a significant difference in the total credits cohorts accumulate when they are considered by geographical areas. One notes that persons from Genesee County are missing in the Junior (JR) cell while having equal percentages in the remaining cells of Freshman (FR), Sophomore (SO), and Senior (SR). Similarly, Saginaw County has 12 participants as reflected by Table 4 and no students in the junior category, but has its students distributed differently from Genesee County in other respects where 25 percent are sophomores or seniors with the remaining 50 percent in the freshman cell of the table. It should be observed that both Genesee and Saginaw counties have very small Ns which suggests some caution in drawing conclusions. Both counties have only 1.5 percent of the total Summer Support population. Kent County also has a small population of

FIGURE 2
AN ICONOGRAPHY OF THE PERCENTAGE OF CHANGE FOR THE GROUP AND GRADUATES PER MAJOR



Group = _____ and (%)

Graduates = ------- and (%)

N = none

TABLE 3

A CROSS TABULATION OF YEARS ENROLLED BY TERM AND YEAR OF ENTRY

Years Enrolled	Year of Entry 1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Row Total
0	(0)	(1) 0.6 5.0 0.1	(2) 1.1 3.3 0.2	(3) 1.7 2.5 0.4	(13) 7.3 11.1 1.6	(11) 6.1 12.2 1.3	(22) 12.3 22.4 2.7	(23) 12.8 21.5 2.8	(7) 3.0 8.0 0.9	(97) 54.2 100.0 11.8	(179) 21.9
1	(5) 2.0 26.3 0.6	(0)	(12) 4.9 19.7 1.5	(32) 13.0 26.2 3.9	(33) 13.4 28.2 4.0	(21) 8.5 23.3 2.6	(22) 8.9 22.4 2.7	(41) 16.6 38.3 5.0	(81) 32.8 92.0 9.9	X	(247) 30.2
2	(0)	(2) 1.6 10.0 0.2	(5) 3.9 8.2 0.6	(17) 13.9 13.9 2.1	(15) 11.7 12.8 1.8	(23) 18.0 25.6 2.8	(23) 18.0 23.5 2.8	(43) 33.6 40.2 5.3	X	X	(128) 15.6
3	(2) 2.0 10.5 0.2	(7) 7.1 35.0 0.9	(9) 9.2 14.8 1.1	(21) 21.4 17.2 2.6	(18) 18.4 15.4 2.2	(10) 10.2 11.1 1.2	(31) 31.6 31.6 3.8	X	X	X	(98) 12.0
4	(10) 9.3 52.6 1.2	(8) 7.4 40.0 1.0	(19) 17.6 31.1 2.3	(28) 25.9 23.0 3.4	(18) 16.7 15.4 2.2	(25) 23.1 27.8 3.1	X	X	X	X	(108) 13.2
5	(1) 2.2 5.3 0.1	(1) 2.2 5.0 1.0	(8) 17.8 13.1 1.0	(15) 33.3 12.3 1.8	(20) 44.4 17.1 2.4	X	X	X	X	X	(45) 5.5

Continuation of TABLE 3

Years Enrolled	Year of Entry 1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Row Total
6	(0)	(0)	(2) 25.0 3.3 0.2	(6) 75.0 4.9 0.7	X	X	X	X	X	X	(8)
7	(1) 16.7 5.3 0.1	(1) 16.7 5.0 0.5	(4) 66.7 6.6	X	X	X	X	X	X	X	(6) 0.7
Column Total	(19) 2.3	(20) 2.4	(61) 7.4	(122) 14.9	(117) 14.3	(90) 11.0	(98) 12.0	(107) 13.1	(88) 10.7	(97) 11.8	Row Total

Count
Row %
Col %
Tot %

participants (1.6%) but differs from Genesee or Saginaw county by having its population spread throughout all four cells. All Michigan's counties and/or "other" states (three) with less than 10 students participating or having participated in the Special Program are lumped into the other category. Oakland and Wayne counties have generated more students for program participation than all other areas combined to include Genesee and Saginaw counties. Students from Oakland and Wayne counties have obtained junior (JR) status at basically the same rates 10.2 and 10.1 percent respectively. While Oakland has 28.7 percent and Wayne has 61.4 percent of total students Oakland county students did significantly better, when judge by obtaining enough credits to be ranked senior (SR), by having 24.7 percent as contrasted with 16.7 percent for Wayne County. Surprisingly, they are identical in the up to freshman status cells with 44.7 percent each. These high percentages of up to freshman persons can be explained by the fact that most of the classes of 1975 and 1976 are from those counties and many of the 1975, though still enrolled, have not reached sophomore status yet by completing 28 to 58 credits. Most of the difference in the number of students in each cell is probably caused by the selection process over which Special Programs rightly has no direct control. The data are unable to predict success by areas although it shows some significance.

Now let us turn and look across the total ten years and watch the way the students participate. Table 5 below shows how each class moves through time. The first class did not lose a single person in its first year, but lost five in the second year as contrasted to the second class (1968) which lost one person the first year but none in the second year.

TABLE 4

A CROSS TABULATION OF TOTAL CREDITS CUMMULATIVE BY RESIDENCE CODES

Student Status	Residence Code: Genesee* 1	Kent* 2	Oakland* 3	Saginaw* 4	Wayne* 5	Others** 6	Row Total
Freshman	(4)	(1)	(105)	(6)	(225)	(19)	(360)
	1.1	0.3	29.2	1.7	62.5	5.3	44.0
	33.3	7.7	44.7	50.0	44.7	43.2	
	0.5	0.1	12.8	0.7	27.5	2.3	
Sophomore	(4)	(5)	(48)	(3)	(143)	(15)	(218)
	1.8	2.3	22.0	1.4	65.6	6.9	26.6
	33.3	38.5	20.4	25.0	28.4	34.1	
	0.5	0.6	5.9	0.4	17.5	1.8	
Junior	(0)	(4)	(24)	(0)	(51)	(2)	(81)
		4.9	29.6		63.0	2.5	9.9
		30.8	10.2		10.1	4.5	
		0.5	2.9		6.2	0.2	
Senior	(4)	(3)	(58)	(3)	(84)	(8)	(160)
	2.5	1.0	36.3	1.9	52.5	5.0	19.5
	33.3	23.1	24.7	25.0	16.7	18.2	
	0.5	0.4	7.1	0.4	10.3	1.0	
Column Total	(12)	(13)	(235)	(12)	(503)	(44)	(819)
	1.5	1.6	28.7	1.5	61.4	5.4	100.0

Count
Row %
Col %
Tot %

$X^2 = 26.39235$ D.G. = 15 P-= 0.0341 C = 0.17669

*Michigan's Counties

**Other Michigan's Counties and Three Out of State Students

By the second year, the program director has learned better how to eliminate the few persons who were not serious about attending college. From 1968-1975 one will notice that a few students are always gone after the first year. In 1973 and 1974, 22 and 23 students respectively left the program after the first year which is around 22 percent of each group. Then 1975 data suggests that attrition after the first year in back under control as only 8 percent of the class had left after their first year.

At the bottom of the table one notices how the participants started graduating by year and sex. Although there is significant difference for sex in a year by year measure, over time it tends to balance out. The different numbers of males and females recruited in a given year accounts for some of the variance and the college going habits of males and females explains some, i.e. a review of research literature illustrates females are more likely to finish college in four years while the males are more likely to seek the degree longer and more likely to return to college from the dropout groups. Societal force beyond the scope of this analysis can explain the rest of the deviation.

Table 6 examines first term averages for men and women. The male does better in the first term than the female does which suggests that Special Program students do not represent a random sample from a "normal" population curve. All national studies that the author is familiar with indicate that the Black female makes better grades than the Black male in high school or college; maybe because these students are selected on a different criteria than the regular minority college student, they differ in their first term GPA from those persons also. Although this sample is small, 5 degrees

TABLE 5

THE RELATIONSHIP BETWEEN YEAR OF ENTRY AND LAST TERM ENROLLED AND THE NUMBER OF GRADUATES BY GROUP AND SEX: Ns IN (PARENTHESES)

	Year of Entry									
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Last Year Enrolled
0	X	X	X	X	X	X	X	X	X	1967
26.3 (5)	5.0 (1)	X	X	X	X	X	X	X	X	1968
0.0 (0)	0.0 (0)	3.3 (2)	X	X	X	X	X	X	X	1969
10.5 (2)	10.0 (2)	19.7 (12)	2.5 (3)	X	X	X	X	X	X	1970
52.6 (10)	35.0 (7)	8.2 (5)	26.2 (32)	11.1 (13)	X	X	X	X	X	1971
5.3 (1)	40.0 (8)	14.8 (9)	13.9 (17)	28.2 (33)	12.2 (11)	X	X	X	X	1972
0.0 (0)	5.1 (1)	31.1 (19)	17.2 (21)	12.8 (15)	23.3 (21)	22.4 (22)	X	X	X	1973
5.3 (1)	0.0 (0)	13.1 (8)	23.0 (28)	15.4 (18)	25.6 (23)	22.4 (22)	21.5 (23)	X	X	1974
0.0 (0)	5.0 (1)	3.3 (2)	12.3 (15)	15.4 (18)	11.2 (10)	23.5 (23)	38.3 (41)	8.0 (7)	X	1975
0.0 (0)	0.0 (0)	6.6 (7)	4.9 (6)	17.1 (20)	27.8 (25)	31.6 (31)	40.2 (43)	92.0 (81)	100.0 (97)	1976
Total* 19	20	61	122	117	90	98	107	88	97	819 Grand Total*
Degree by year:										
Males*			5	11	15	14	13	3		61
Females*		2	4	7	7	12	12	12		56
Total*		2	9	18	22	26	25	15		117

*All Figures refer to N

of freedom spread the participants over the cells very well. Table 6 shows that 15.2 percent of the males make first term averages below 1.00 contrasted with 23.8 percent of the females in this cell. Stated another way, of the persons who make less than 1.00 (a "D" grade) at O.U. in their first term over 60 percent are females. From 1.00 to 1.99 the male and female are about even, but after 2.00 the male as a group does better than the female does and the difference is significant at the 95 percent confident level. The contingency coefficient of about .12 is not very strong because the variance is considerable.

It is interesting to observe that the degree receivers are distributed similar to the total group. The reader should know that the statistics at the bottom of the table relates to the sex and not the DEGY portion of the table. The most important point here is that while these students leave high school as "C" students, for the most, they spread themselves through all grade levels at college. Well, if we look at cumulative averages maybe a pattern will emerge.

Table 7 reveals that the male and female are very similar in their abilities to make below 2.00 GPAs and they remain about even until we examine the category of over 3.49 GPA. The male is twice as likely as the female to make 3.50 and up but because of the small size of the sample (and the smaller still who score at this level) considerable caution is warranted in interpreting the data. Pay particular attention to the small chi square (X2=2.90), contingency coefficient (c=.06), and that there is no significance (P=NS). On the degree side, two persons are found to have slightly under 2.00 and only one person at 3.50 and above.

TABLE 6

A CROSS TABULATION OF FIRST TERM AVERAGE BY SEX AND TOTALS FOR YEAR DEGREE AWARDED

First Term Average		Sex: Male 1	Female 2	Total	Degree Receivers
Up to 99	1	63 39.6 15.2 7.7	96 60.4 23.8 11.7	159 19.4	(2) 1.7
100-199	2	72 49.7 17.3 8.8	73 50.3 18.1 8.9	145 17.7	(13) 11.1
200-249	3	92 52.3 22.2 11.2	84 47.7 20.8 10.3	176 21.5	(32) 27.4
250-299	4	88 54.0 21.2 10.7	75 46.0 18.6 9.2	163 19.9	(32) 27.4
300-349	5	63 55.3 15.2 7.7	51 44.7 12.6 6.2	114 13.9	(22) 18.8
350-Up	6	37 59.7 8.9 4.5	25 40.3 6.2 3.1	62 7.6	(16) 13.7
Column Total		415 50.7	404 49.3	819 100.0	(117) 100.0

Count
Row %
Col %
Tot %

X^2 = 11.69651 D.F. = 5 P = 0.0392 C = 0.11866

TABLE 7

A CROSS TABULATION OF CUMULATIVE AVERAGE (GPA) BY SEX AND TOTALS FOR YEAR DEGREE AWARDED

GPA		SEX			
		MALE	FEMALE	Total	DEGREE RECEIVERS
Up to 99	1	27 56.3 6.5 3.3	21 43.8 5.2 2.6	(48) 5.9	(0)
100-199	2	84 47.2 20.2 10.3	94 52.8 23.3 11.5	(178) 21.7	(2) 1.7
200-249	3	170 51.1 41.0 20.8	163 48.9 40.3 19.9	(333) 40.7	(44) 37.6
250-299	4	104 50.0 25.1 12.7	104 50.0 25.7 12.7	(208) 25.4	(56) 47.9
300-349	5	24 55.8 5.8 2.9	19 44.2 4.7 2.3	(43) 5.3	(14)
350 Up	6	6 66.7 1.4 0.7	3 33.3 0.7 0.4	(9) 1.1	(1) 0.9
Column Total		415 50.7	404 49.3	(819) 100.0	(117) 100.0

Count
Row %
Col %
Tot %

$x^2 = 2.89312$ D.F.= 5 P = NS

This table shows that high school "C" students tended to become college "C" students. But over 50 percent are making very strong "Cs". These data suggest, given support, mediocre high school students can finish college and a few will do so very well. Now to take a look at how the student takes credits.

Table 8 illustrates the credit taking tendencies of the students and graduates for each year. In the first two years nearly all of the project 20 students took all their credits under code #8 (mixed day/night on credits only). The classes for 1969, 1970, and 1971 all remain just over 75 percent for code #8 and approximately 15 percent under code #12 (mixed day/on and night/on campus credits). Around 1972 the percentage of special programs students taking day/on-campus credits only started to decline, for example, in 1971 (77.7%), 1972 (67.0%), 1973 (57.4%) correspondently night credit taking increased or more correctly the percentage of students who took code #12 (mixed day/on-campus credits) rose thusly, 1971 (16.1%), 1972 (21.6%) and 1973 (38.3%). When 1974 and 1975 are studied,one finds code #8 on the rise again. The 66.7 percent in code #8 and 74.4 percent similarly for 1974 and 1975 respectively correspond to 31.4 and 23.3 percent in code #12 for the same years. Because all Summer Support students must spend their first year on campus and the summer support program is only offered in the day, it seemed pointless to state that the 1976 class all were code #8.

For the graduates, all seemed to have taken day/on-campus credits only until 1973 and their low for code #8 in 1974 were caused basically by persons who had started college back in 1969 or 1970.

TABLE 8
CREDIT TAKING TENDENCY FOR THE GROUP AND THE GRADUATES

YOE	Credit Code #8	DEGY	Credit Code #12	DEGY
1967	94.7 (18)	X	0	X
1968	100.0 (20)	X	0	X
1969	76.7 (46)	X	16.7 (10)	X
1970	77.1 (91)	100.0 (2)	14.4 (17)	0
1971	77.7 (87)	100.0 (9)	16.1 (18)	0
1972	67.0 (59)	100.0 (18)	21.6 (19)	0
1973	57.4 (54)	86.4 (19)	38.3 (36)	9.1 (2)
1974	66.7 (68)	50.0 (13)	31.4 (32)	38.5 (10)
1975	74.4 (64)	56.0 (14)	23.3 (20)	32.0 (8)
1977	X	66.7 (10)	X	20.0 (3)
Total	75.0 (507)	72.6 (85)	19.1 (152)	19.7 (23)

Note Code #8 = day/on-campuses credit only
Code #12 = Mixed day/on and night/on-campus credit
YOE = Year of Entry
DEGY = Term and Year Degree Awarded

There was a change in the administration of the special program in 1971. Organizational research shows that changes in top administrations cause fluation in organizational behavior. Some of the variations need to be perceived in a historical perspective; in 1969 and 1970 the country was at the height of the "do-your-own-thing" era and a great deal of experimentation was permitted on college campuses. There seems to be a relationship between the credit taking tendencies and retention. Day/on campus credits seem more related to retention than any other combination of ways to take courses. In 1975, 74.4 percent of the students were day/on campus credit taking only and retention improved for that year. The credit taking tendency is only one of variety of variables which influence retention/attrition ratios and to assume that the manipulation of this parameter alone would significantly improve retention is to greatly miss the point. The point is that at present there seems to be a relationship between taking day credits and retention, but a drastic change in one variable can have a very unpredictable effect on other groups of associated parameters.

Table 9 below examines relationships between the year the person received the degree and the number of years it took to get that degree. The first year degrees were awarded Summer Support students was 1970. This table demonstrates that 26.5 percent of all the persons who were awarded O.U. degrees had received them in three calendar years. The data also suggest that three persons obtained degrees in two calendar years. Typically, 56.4 percent, the majority, take four years to receive bachelors. In the fifth year, we find that 12.8 percent of the degrees are conferred. The sixth and seventh year produce one graduate each. Because only ten years are

TABLE 9

A CROSSTABULATION OF YEARS ENROLLED BY TERM AND YEAR DEGREE AWARDED

Years Enrolled	YEAR DEGREE AWARDED							Row Total
	1970	1971	1972	1973	1974	1975	1976	
2	(0)	(0)	(1) 33.3 5.6 0.9	(0)	(1) 33.3 3.8 0.9	(1) 33.3 4.0 0.9	(0)	(3) 2.6
3	(2) 6.5 100.0 1.7	(1) 3.2 11.1 0.9	(9) 29.0 50.0 7.7	(9) 29.0 40.9 7.7	(5) 16.1 19.2 4.3	(4) 12.9 16.0 3.4	(1) 3.2 6.7 0.9	(31) 26.5
4	X	(8) 12.1 88.9 6.8	(7) 10.6 38.9 6.0	(13) 19.7 59.1 11.1	(16) 24.2 61.5 13.7	(12) 18.2 48.0 10.3	(10) 15.2 66.7 8.5	(66) 56.4
5	X	X	(1) 6.7 5.6 0.9	(0)	(4) 26.7 15.4 3.4	(8) 53.3 32.0 6.8	(2) 13.3 13.3 1.7	(15) 12.8
6	X	X	X	(0)	(0)	(0)	(1) 100.0 6.7 0.9	(1) 0.9
7	X	X	X	X	(0)	(0)	(1) 100.0 6.7 0.9	(1)
Column Total	(2) 1.7	(9) 7.7	(18) 15.4	(22) 18.8	(26) 22.2	(25) 21.4	(15) 12.8	(117) 100.0

Count
Row %
Col %
Tot %

analyzed, the pattern did not have enough time to completely develop. The small number of possible graduates across the cells suggests caution in concluding the length of time the average Summer Support student takes to graduate. The data do show, that although the selection criterion suggests a homogeneous mix, the outcome spreads over a wide range. The most conclusive statement that can be made at this point is that students with seemingly very similar characteristics still need a variety of programatic options. The data further suggest that maybe Special Programs should consider some reentry options for its Summer Support students which could increase its overall success rates measurably.

Table 10 computes the drop-out/transfer percentages (because of a variety of parameters must be either controlled or weighted against each other, the accuracy is estimated to be around 97 percent, stated another way, an error of .0343980344 was found in these data). While there is a slight error in the data, the level of confidence is sufficient to explain the data. Suggesting only that the reader bear in mind that there is a very small error. Table 10 shows that 12 students left the program as seniors and that 41 left as juniors which is around 13 percent. One should note that 75 percent of the seniors and 80 percent of the juniors left in good standing. Moreover, the remaining JR & SR were very close to good standing and are predicted to be able to survive another institution where there is a better fit into the institution climate or more interest is generated.

Also, it is informative to observe that only 42.7 percent of all Summer Support students who left at sophomore or below were in academic difficulties at the time of their departure. The spread of the students up to

TABLE 10
A CROSS TABULATION OF DROPPED/TRANSFERRED BY CUMMULATIVE AVERAGE

Exit Status	CUMMULATIVE AVERAGE						
	Up to 199 1	100-199 2	200-249 3	250-299 4	300-349 5	350 Up 6	Row Total
Senior	(0)	(3) 25.0 2.5 0.7	(7) 58.3 5.0 1.7	(2) 16.7 2.5 0.5	(0)	(0)	(12) 2.9
Junior	(0)	(8) 19.5 6.8 2.0	(17) 41.5 12.2 4.2	(13) 31.7 16.3 3.2	(3) 7.3 15.8 0.7	(0)	(41) 10.0
Sophomore and Under	(45) 12.6 100.0 11.0	(107) 30.1 90.7 26.2	(115) 32.3 82.7 28.1	(65) 18.3 81.3 15.9	(16) 4.5 84.2 3.9	(8) 2.2 100.0 2.0	(356) 87.0
Column Total	(45) 11.0	(118) 28.9	(139) 34.0	(80) 19.6	(19) 4.6	(8) 2.0	(409) 100.0

Count
Row %
Col %
Tot %

sophomore is interesting as they are distributed across all cells. The author feels that most of the self selection takes place at this point. Many of the students in the up to 1.99 GPA may select a community college or a smaller four-year college while many of the persons above 3.00 GPA may select a more prestigious university. If one is wondering where is the rest of the students that make up the (819) the graduates and the currently enrolled students are missing in this data. The most inpressive data, to the writer, were the 45 students who left below an "D" (1.00) GPA who represented only 11.0% of all transferring or dropping persons. Examined another way, one sees that over 60 percent of all the students who left O.U. (from the Summer Support Program) for whatever reason did so in good academic standing. Twenty-seven students left with a GPA above 3.00 (or "B") who represents 6.6 percent of all leaving persons.

When one considers (what was shown above) that the average high school GPA of these students was only 2.23, the Special Program then seems to have considerable impact on mediocre *high school students. Now to look at all students.

Table 11 reflects the relationship between total cumulative credits and number of years enrolled at O.U. (for Summer Support students of course). The careful reader have probably noticed that some tables have statistics under them (chi square, contingency coefficient, etc.) while others do not have statistics under them. The researcher decides when the statistics would be more confusing than helpful or the nature of the computing command is such that those statistics are distorted by the characteristics of the variable; in those cases, the statistics are omitted. All relevant

*Mediocracy is based only on recorded high school grades.

statistics are considered in the presentation of the narrative. The freshman is those persons who have from 0-27 cumulative total credits completed, the sophomore (28-58), the junior (59-90), and the senior (over 90) cumulative credits completed. Table 11 simply shows the number and percentage of student who has reached certain levels of classification and the number of years between first enrollment and last enrollment to obtain that level. We see that 44.0 percent obtain cumulative credits up to freshman classification. The most important statistics in this table are the 160 students who obtained the status of senior based on cumulative total credits completed. Table 12 shows that 292 have not had sufficient time to be seniors which means instead of the 19.5 percent, 30.3 percent of the possible have obtained at least senior status. Now to complete Table 11, the upper left hand corner of this table is telling, in that, 179 have zero years, but the 97 persons from the class of 1976 must be considered, which means that 82 or about 11 percent of the students leave before the next calendar year. Looking down the three year column we see 41.8 percent reaching senior status, down the four year column 73.1 percent reach senior status, and down the five year column 64.4 percent reach senior status. The junior and sophomore cells show that many of the persons are making progress but at paces slower than the typical "four year and out" college expectation. The fact some of the students have been enrolled six and seven years corroborate the earlier speculation that the student needs more options. This table can be misleading or difficult to comprehend because the variable are cumulative credits and time (abstract). Table 12 should help to clarify Table 11.

TABLE 11

A COMPARISON BETWEEN THE NUMBER OF YEARS THE GROUP HAS PURSUED EDUCATION AND THE AMOUNT OF CREDITS EARNED

Student Status	YEARS ENROLLED*								Row Total
	0	1	2	3	4	5	6	7	
Freshman	(179)	(153)	(18)	(6)	(3)	(1)	(0)	(0)	(360)
	49.7	42.5	5.0	1.7	0.8	0.3			44.0
	100.0	61.9	14.1	6.1	2.8	2.2			
	21.9	18.7	2.2	0.7	0.4	0.1			
Sophomore	(0)	(93)	(89)	(24)	(5)	(5)	(2)	(0)	(218)
		42.7	40.8	11.0	2.3	2.3	0.9		26.6
		37.7	69.5	24.5	4.6	11.1	25.0		
		11.4	10.9	2.9	0.6	0.6	0.2		
Junior	(0)	(1)	(18)	(27)	(21)	(10)	(2)	(2)	(81)
		1.2	22.2	33.3	25.9	12.3	2.5	2.5	9.9
		0.4	14.1	27.6	19.4	22.2	25.0	33.3	
		0.1	2.2	3.3	2.6	1.2	0.2	0.2	
Senior	(0)	(0)	(3)	(41)	(79)	(29)	(4)	(4)	(160)
			1.9	25.6	49.4	18.1	2.5	2.5	19.5
			2.3	41.8	73.1	64.4	50.0	66.7	
			0.4	5.0	9.6	3.5	0.5	0.5	
Column Total	(179)	(247)	(128)	(98)	(108)	(45)	(8)	(6)	(819)
	21.9	30.2	15.6	12.0	13.2	5.5	1.0	0.7	100.0

Count
Row %
Col %
Tot %

*Year is computed from cohorts entry and exit (and/or still enrolled) status

Table 12 shows the correlations between cumulative credits and the year of entry. The control for the "x" cells is functioning but there was no control for the persons who enrolled in 1976. When we inspect the 1967 class, the data indicate that 68.4 percent of that class obtained credit sufficient to be seniors and for the 1965 class it was 70.0 percent. The 1969-71 classes sort of illustrate the pattern although no decisive pattern can be generated in a mere three years. The strong chi square (X^2= 356.55) demonstrates the directional variance. Between 1969-1971 the major forces operating on the chi square were history, size, and attitude. This means, things change over time and with size increases and those parameters effect attitude. The point is that simple explanations will tend to be simplistic; analysis of people are complex and the complexities are directly proportional to the size of the group and time span considered.

When we examine freshmen from 1975 back to 1972, a pattern seems to emerge: in 1975, 591.1 percent of the students are freshmen; in 1974, freshmen are down to 49.5 percent; in 1973, they are lower to 43.9 percent; and in 1972, 30.0 percent are still in the freshman cell. Also, 1971 back to 1969 sort of confirms the trend, with 34.2 percent, 20.5 percent, and 27.9 percent inversely, indicating that between 20.0 and 30.0 percent of the Summer Support students will remain freshmen. Then tracing sophomores backward from 1975 to 1969, allows the projection of 15.0 to 25.0 percent for them. For juniors, considering 1973 back to 1969 protract a figure of 15.0 to 20.0 percent. Finally, for seniors from 1972 back to 1969 show a figure of around 40 percent or stated another way, the seniors category is on its way upward of 40 percent because as shown earlier some persons have sophomore and junior status over extended period of time (see Table 11 for

TABLE 12

A CROSS TABULATION OF TOTAL CREDITS CUMULATIVE BY YEAR OF ENTRY

Student Status	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Row Total
Freshman	(5)	(1)	(17)	(25)	(40)	(27)	(43)	(53)	(52)	(97)	(360)
	1.4	0.3	4.7	6.9	11.1	7.5	11.9	14.7	14.4	26.9	44.0
	26.3	5.0	27.9	20.5	34.2	30.0	43.9	49.5	59.1	100.0	
	0.6	0.1	2.1	3.1	4.9	3.3	5.3	6.5	6.3	11.8	
Sophomore	(1)	(4)	(8)	(41)	(31)	(24)	(27)	(46)	(36)		(218)
	0.5	1.8	3.7	18.8	14.2	11.0	12.4	21.1	16.5	X	26.6
	5.3	20.0	13.1	33.6	26.5	26.7	27.6	43.0	40.9		
	0.1	0.5	1.0	5.0	3.8	2.9	3.3	5.6	4.4		
Junior	(0)	(1)	(13)	(9)	(15)	(16)	(19)	(8)			(81)
		1.2	16.0	11.1	18.5	19.8	23.5	9.9	X	X	9.9
		5.0	21.3	7.4	12.8	17.8	19.4	7.5			
		0.1	1.6	1.1	1.8	2.0	2.3	1.0			
Senior	(13)	(14)	(23)	(47)	(31)	(23)	(9)				(160)
	8.1	8.8	14.4	29.4	19.4	14.4	5.6	X	X	X	19.5
	68.4	70.0	37.7	38.5	26.5	25.6	9.2				
	1.6	1.7	2.8	5.7	3.8	2.8	1.1				
Column Total	(19)	(20)	(61)	(122)	(117)	(90)	(98)	(107)	(88)	(97)	(819)
	2.3	2.4	7.4	14.9	14.3	11.0	12.0	13.1	10.7	11.8	100.0

Count
Row %
Col %
Tot %

$X^2 = 356.54604$ D.F. = 27 P = 0.0000 C = 0.55073

example). Persons in classes from 1976 to 1973, in reversing order, have not had adequate time to get into the total pattern, the mode (in percentage), seemingly, will look thusly 20 to 30, 15 to 25, 15 to 20, and 35 to 40 for freshman, sophomore, junior, and senior respectively.

Table 13 illustrates the sample by "terms to graduate after grade are in," but one must remember the actual situation with respect to grades; students have considerable time periods to change incomplete and "N" grades causing some overlap between any two cells read up and down. The phenomenon, alone with standard coding errors, suggest some caution in attempting to draw conclusions from any single cell. For example, in 1967 the students in "0" and "1" cells all received O.U. degrees and in 1968 the two students in cell "1" received degrees, one from O.U. and one from another institution.

If one excludes 1976, the "8" cells across the bottom will generally show the Summer Support students who received very little O.U. credits. It is difficult to interpret the special program as having helped those young persons very much. One notes that in 1973 and 1974 the "8" group had climbed to around 18 percent and again, 1975 shows that this group is back under control as only about 10 percent are in the category for 1975.

In a study done by the Office of Student Services, independence of the evaluation specialist, it was found that very nearly 100 percent of the persons, who get past five terms, graduate at O.U. or other institutions. Table 13 clearly demonstrates that the majority of the Summer Support students are headed for the top of this table and graduation. Although

TABLE 13

THE RELATIONSHIP BETWEEN TERM TO GRADUATE AFTER GRADES ARE IN AND YEAR OF ENTRY Ns IN (PARENTHESES)

Year of Entry										
1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	Term To Graduate
31.6 (6)	60.0 (12)	27.9 (17)	23.8 (29)	12.8 (15)	15.6 (14)	6.1 (6)	X	X	X	0
31.6 (6)	10.0 (2)	11.5 (7)	11.5 (14)	9.4 (11)	7.8 (7)	3.1 (3)	X	X	X	1
0	0	1.6 (1)	4.1 (5)	5.1 (6)	3.3 (3)	6.1 (6)	X	X	X	2
5.3 (1)	0	11.5 (7)	3.3 (4)	6.8 (8)	4.4 (4)	8.2 (8)	X	X	X	3
0	5.0 (1)	9.8 (6)	4.1 (5)	6.0 (7)	13.3 (12)	9.2 (9)	(7)	X	X	4
5.3 (1)	20.0 (4)	6.6 (4)	10.7 (13)	10.3 (12)	10.0 (9)	10.2 (10)	15.9 (17)	3.4 (3)	X	5
0	0	6.6 (4)	22.1 (27)	16.2 (19)	16.7 (15)	19.4 (19)	27.1 (29)	37.5 (33)	X	6
26.3 (5)	0	18.0 (11)	14.8 (18)	18.8 (22)	17.8 (16)	20.4 (20)	26.2 (28)	48.9 (43)	X	7
0	5.0 (1)	6.6 (4)	4.7 (7)	14.5 (17)	11.1 (10)	17.3 (17)	18.7 (20)	10.2 (9)	100.0 (97)	8
Total (19)	(20)	(61)	(122)	(117)	(90)	(98)	(107)	(88)	(97)	(819)

Note: The cut-off is with the 1976 Summer Support students, which explains why none of them had a chance to advance in this table.

the Special Program has historically been under staffed, it seems to be coming into its own as demonstrated by its success rates.

Table 14 controls for first term averages, last term averages, and cumulative averages and correlates the year of entry, the year degree awarded, and sex against residence, entry major, and last major. This table illustrates that the persons were selected from different areas in various years and ratios and that that selection was not based on the student ability or inability to making passing grade at O.U.

When one considers any entry year, the students did not differ in their entry majors. The entry major table above will show that most students for any year tended to start in the typically well known majors. To some extent, that reflects the high school counselors inability to council these students into a variety of majors. There is some significance when the last majors are studied. The change from year to year is believed to be related to the experiences the students had at O.U. - different professors and attitudes caused the students to change to different majors in different years.

The persons who received degrees vary geographically because of the recruiting efforts, other counties did not have the same chance as Oakland and Wayne counties. The significance seems related more to size than any thing else. Degrees are strongly related to majors at entry and graduation. Stated simply, the person who planned to graduate at O.U. had to either be in the "right" major or get into the "right" major. As shown in table 2 certain majors were not related to Special Program students graduation

TABLE 14

A PARTIAL CORRELATION WHICH CONTROLS FOR FIRST TERM AVERAGE, TERM AVERAGE, AND GPA

	Residence	Entry Major	Last Major
Year of Entry	0.2160 (814) s=0.001	-0.0425 (814) s= 0.113	-0.0979 (814) s=0.003
Degree Receiver	-0.0914 (814) s=0.004	0.1346 (814) s=0.001	0.1790 (814) s=0.001
Sex	0.0493 (814) s=0.080	0.1114 (814) s=0.001	0.1617 (814) s=0.001

Residence = Home Address

(co-efficient/D.F./significance)

while others were. The last major being significance in all cells tends to bear out this conclusion.

Sex is not significant as related to residence because of the sizes of the students groups from counties other than Oakland or Wayne and over time a sex balance was obtained. But sex is sterotyped into certain majors at entry and exist levels. Which means that one can predict males in certain majors and females in other majors.

Table 15 utilizes some fairly complex computations and controls to give each student an almost equal change by controlling and weighting the factors most likely to make differences in outcomes. The year of entry is significant because in the earlier years when the program was small the persons graduated at a higher percentage and given (seemingly) the same chances graduation spreaded over 3 to 7 years, although years are controlled. Sex is significant because in some years there would be a disproportioned number of females and in other years the male would be disproportioned although the end results are balance at this time. The residence against year of entry is significance, as some years most males were obtained from a certain country, etc. The cumulative averages explain little about year of entry although it does predict degree, term average, and cumulative average. Note that the cumulative averages will not predict sex, but that cumulative credits will, this is because of differing amounts of credits needed to graduate in different majors and females and males differ in majors selection. Entry major against last major show that there is considerable major changes. Sex and residence are the only items in this partial correlation that can not predict degree. The reader can

TABLE 15

A PARTIAL CORRELATION OF COEFFICIENTS CONTROLLING FOR:
THE DIFFERENCE BETWEEN THE CUMULATIVE NUMBER CREDITS ATTEMPTED, MINOR CUMULATIVE NUMBER OF CREDITS EARNED, THE DIFFERENCE BETWEEN THE TERM CREDITS ATTEMPTED MINUS THOSE EARNED, AND THE NUMBER OF YEARS EDUCATION WAS PURSUED AT OAKLAND UNIVERSITY

	YOE	DEGY	SEX	RESC	TAVE	CUMC	CUMA	EMAJ	LMAJ
YOE	1.0000 (814) s=0.001	-0.2138 (814) s=0.001	0.1102 (814) s=0.001	0.1688 (814) s=0.001	0.0480 (814) s=0.085	-0.1083 (814) s=0.001	0.0667 (814) s=0.028	-0.0948 (814) s=0.003	-0.0644 (814) s=0.003
DEGY	-0.2138 (814) s=0.001	1.0000 (814) s=0.001	0.0413 (814) s=0.119	-0.0226 (814) s=0.259	0.3490 (814) s=0.001	0.7336 (814) s=0.001	0.1537 (814) s=0.001	0.1359 (814) s=0.001	0.1633 (814) s=0.001
SEX	0.1102 (814) s=0.001	0.0413 (814) s=0.119	1.0000 (814) s=0.001	0.0433 (814) s=0.108	0.0793 (814) s=0.012	0.0856 (814) s=0.007	0.0077 (814) s=0.413	0.1118 (814) s=0.001	0.1906 (814) s=0.001
RESC	0.1688 (814) s=0.001	-0.0226 (814) s=0.259	0.0433 (814) s=0.108	1.0000 (814) s=0.001	0.0355 (814) s=0.156	0.0400 (814) s=0.127	0.0152 (814) s=0.333	-0.0256 (814) s=0.232	-0.0289 (814) s=0.205
TAVE	0.0480 (814) s=0.085	0.3490 (814) s=0.001	0.0793 (814) s=0.012	0.0355 (814) s=0.156	1.0000 (814) s=0.001	0.4578 (814) s=0.001	0.5053 (814) s=0.001	0.0781 (814) s=0.013	0.0613 (814) s=0.040
CUMC	-0.1083 (814) s=0.001	0.7336 (814) s=0.001	0.0856 (814) s=0.007	0.0400 (814) s=0.127	0.4578 (814) s=0.001	1.0000 (814) s=0.001	0.2909 (814) s=0.001	0.1082 (814) s=0.001	0.1766 (814) s=0.001
CUMA	0.0667 (814) s=0.028	0.1537 (814) s=0.001	0.0077 (814) s=0.413	0.0152 (814) s=0.333	0.5053 (814) s=0.001	0.2909 (814) s=0.001	1.0000 (814) s=0.001	0.0121 (814) s=0.365	0.0111 (814) s=0.375
EMAJ	-0.0948 (814) s=0.003	0.1359 (814) s=0.001	0.1118 (814) s=0.001	-0.0256 (814) s=0.232	0.0781 (814) s=0.013	0.1082 (814) s=0.001	0.0121 (814) s=0.365	1.0000 (814) s=0.001	0.6239 (814) s=0.001
LMAJ	-0.0644 (814) s=0.033	0.1633 (814) s=0.001	0.1906 (814) s=0.001	-0.0289 (814) s=0.205	0.0613 (814) s=0.040	0.1766 (814) s=0.001	0.0111 (814) s=0.375	0.6239 (814) s=0.001	1.0000 (814) s=0.001

Coefficient/ (D.F.) / Significance

YOE = Year of Entry; DEGY = Degree Received; RESC = Residence; TAVE = Term Average; CUMC = Cumulative Credits; CUMA = Cumulative Average; EMAJ = Entry Major; LMAJ = Latest Major.

continue in this fashion to examine items of concern and remember that one cannot measure a variable against itself (i.e. year against year yields a coefficient of 1.0000 which means that the measurement is invalid.)